

What is claimed is:

1. A roof curb, comprising:

a plurality of exterior planar panels connected together to form a

4 rectangular box, each of said panels having a top edge, a bottom edge, an interior surface, an exterior surface, and first and second ends, and defining an elongated direction extending from said first end to said second end;

said plurality of exterior planar panels including first and second adjacent

8 exterior planar panels;

said first adjacent exterior panel having a bent portion at its first end at right angles to its elongated direction;

one of said bent portion and said second panel defining a tab having a first

12 end secured to its respective panel and a second end that is free, said tab also including a projection extending parallel to the elongated direction of said first adjacent exterior planar panel;

the other of said bent portion and said second adjacent exterior planar

16 panel defining a strap having first and second ends secured to the respective panel and an intermediate portion offset from its respective panel, said intermediate portion defining first and second edges and an opening sized to receive the projection of said tab;

wherein said first and second adjacent exterior planar panels are

20 assembled together by aligning the tab with the strap and sliding the free end of the tab into the offset intermediate portion of said strap until the projection from said tab is received in the opening in said strap, thereby locking together said first and second adjacent exterior planar panels and forming a corner of said rectangular box.

2. A roof curb as recited in claim 1, wherein said one panel has a plurality of said tabs oriented in the same direction, and said other adjacent exterior planar panel has a corresponding plurality of said straps, and wherein said corresponding tabs are received in their corresponding straps, with the projections from said tabs received in the corresponding openings in said corresponding straps, securing said first and second adjacent exterior planar panels together.

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3. A roof curb as recited in claim 2, wherein said tabs and straps are arranged with an irregular spacing so the first and second exterior planar panels can only be connected together with the panels in the correct orientation relative to each other.

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4. A roof curb as recited in claim 2, wherein said plurality of tabs is located on said bent end portion and have different distances between the end of the tab and its respective projection, so that a first of said tabs begins entering its respective strap before a second of said tabs enters its respective strap, and so that the projections from both said first and second projections align with their respective openings at the same time.

5. A roof curb as recited in claim 1, and further comprising at least one interior panel, said interior panel having at least one right angle bent end abutting the interior surface of one of said exterior planar panels, one of said interior surface and said right angle bent end comprising a tab having a free end and a projection, and the other of

said interior surface and said right angle bent end having a strap defining an opening, said strap receiving said tab with said projection fitting into said opening.

4 6. A roof curb as recited in claim 5, wherein there is a plurality of said interior panels.

7. A roof curb, comprising:

8 four exterior panels connected together to form a rectangular box, including two side panels and two end panels, with adjacent panels connected to each other to form the corners of the box;

each of said panels having a top edge, a bottom edge, an interior surface,
12 an exterior surface, and first and second ends, and defining an elongated direction extending from the first end to the second end;

each of said side panels having bent portions at its first and second ends at right angles to its elongated direction; wherein one of said respective bent portion and its
16 respective adjacent end panel defines a tab having a first end secured to its respective panel and a second end that is free, said tab also including a projection extending parallel to the elongated direction of said side panels; and wherein the other of said bent portion and said end panel defines a strap having first and second ends secured to its respective
20 panel and an intermediate portion offset from its respective panel, said intermediate portion defining first and second edges and an opening sized to receive the projection of said tab;

wherein said side panels and end panels are assembled together by aligning the respective tabs with the respective straps and sliding the free ends of the tabs into the offset intermediate portions of the straps until the projections from the tabs are received in the openings in the respective straps, thereby locking together the side panels and end panels and forming the corners of said rectangular box.

8. A roof curb as recited in claim 7, wherein the tabs are on the bent portions of the side panels and the straps are on the end panels.

9. A roof curb as recited in claim 8, wherein at least some of said panels define intermediate straps, and further comprising intermediate panels having bent ends defining tabs, which are received in their respective intermediate straps.

10. A roof curb as recited in claim 9, wherein each of the corners of said box is secured by at least three pairs of straps and tabs, which are spaced apart at an irregular spacing so that the side panels and end panels can only be assembled in one orientation relative to each other.

11. A roof curb as recited in claim 10, wherein there is a different distance between the end and the projection on each of the three tabs at each corner, so that each of the three tabs can be inserted into its respective strap at a different time during the progression of the corner assembly, and so that all three of the projections reach their respective holes at the same time.

12. A roof curb, comprising:

first and second side panels and first and second end panels assembled

- 4 together to form a rectangular box having four corners, wherein the connections between the respective end panels and side panels at the corners are formed entirely by interlocking tabs and straps formed on the panels, without requiring any additional fasteners.